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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,763	07/18/2003	Ikuo Tachibana	ZUIKP0100USA	3134

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EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,763

Applicant(s)

TACHIBANA ET AL.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 20-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 20, 23, and 35 are rejected under 35 U.S.C. 102(a) as being anticipated by Japanese Patent 2001-478.

Japanese Patent '478 suggested that those skilled in the art of manufacturing a disposable undergarment would have known to apply an elastic in the form of elastic strands 1 between two nonwoven webs 6 and 12 wherein the elastics were secured to the webs with adhesive from dispenser 19. the reference taught that after lamination the elastics were weakened as by cutting the assembly with a cutting mechanism 21 wherein the elastics would snap back in those regions where the elastics were cut and be retained in those regions where the elastics were adhesively secured. The reference taught that one skilled in the art would have applied a reinforcing tape or label 3 onto the assembly in the region where the elastics have been cut and/or weakened. More specifically, the reference taught that one skilled in the art would have applied adhesive upon the substrate with the printing thereon, see applicator 23 which applied adhesive upon web 3. The reference taught that the adhesive coated web was then cut with knife 24 in order to provide discrete pieces of tape 3 which were attached to the web in the regions where the elastics were severed, see Figures 1-4 and 8.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20-29 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2001-478 in view of Ducker.

Japanese Patent '378 is discussed above in paragraph 2 and applicant is referred to the same for a complete discussion of the reference. The reference failed to teach that those skilled in the art would have applied heat and embossing pressure to melt the elastics and break and/or weaken the same in the operation of weakening the elastics in the required zones in Japanese Patent '478. the applicant is advised that one skilled in the art of weakening an elastic material would have understood that as an alternative to severing by cutting one could have passed the material between a shaping roll and an anvil with the application of heat to effect the breaking and/or weakening of the elastics as suggested by Ducker.

Ducker et al suggested that it was known to apply elastic strands upon a nonwoven web which carried an adhesive thereon and was bonded between two such nonwoven webs. Subsequent to the bonding of the elastics to the nonwoven webs, the reference suggested that the elastic was to be deactivated via maceration of the elastic with the use of macerators, chemicals, selective laser beams, heat, or freezing means in order to deactivate the adhesive in particular zones. The macerator included a first

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embossing roller with macerating teeth thereon and a second macerating roller which was merely a back-up roller. The reference suggested that the use of heat to melt the elastic strands would have been a suitable alternative to mechanical maceration. Additionally, the reference suggested that those skilled in the art at the time the invention was made would have understood that the maceration operation would have cut the elastics in those regions where one did not desire for there to be elastic stretch in the finished assembly. the reference did not expressly state that the heating means associated with the deactivation would have cut the strands, one viewing the reference as a whole would have understood that this was what was desired by Ducker et al. note that in the freezing of the strands and in the maceration of the same the reference made it clear that the strands were cut or severed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the techniques of Ducker et al to sever and deactivate the elastics where desired in the absorbent diaper product as an alternative to the cutting operation performed by Japanese Patent 2001-478. The reference did not expressly state that the heating was enough to melt the webs and/or elastic, however the effect of the heating was to deactivate the elastics which were the same effect desired by applicant.

With regard to claims 24-29, the applicant is advised that the reference to Ducker suggested that those skilled in the art would have utilized an embossing roller and a counter roller for the maceration of the elastics. While the reference did not expressly state what the specific interval of the projections was, one skilled in the art would have been expected to determine the same through routine experimentation and such would

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have been expected to have been attained in order to effectively sever the elastics disposed between the two webs. The reference to Ducker et al suggested the specified pattern of embossments. A plurality of teeth as depicted is believed to be a lattice and additionally, use of various embossing patterns was well known in the art of diaper manufacture. Selection of a specific pattern would have been within the purview of the ordinary artisan dependent upon the desired end effect one wished to attain. Regarding claims 15 and 16, note that the reference suggested that the webs were joined together and then the elastics were severed. Regarding claims 33-35, the reference suggested that those skilled in the art at the time the invention was made would have utilized elastic strands (strings) for the elastic material in the process.

5. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 4 further taken with Borsuk et al.

While the reference to Japanese Patent '478 and Ducker et al suggested that one skilled in the art at the time the invention was made would have applied an adhesive material upon the nonwoven web, the reference failed to teach that those would have employed electrostatic forces to facilitate the application wherein the adhesive would have had a charge applied to the same and the substrate to be coated would have had an opposite charge associated with it. The applicant is referred to paragraphs 2 and 4 above for a complete discussion of Japanese Patent '478 and Ducker et al. The artisan would have understood that in the manufacture of a disposable diaper such electrostatic coating with an adhesive would have been desirable as such would have facilitated proper placement of the adhesive upon the

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substrate during the coating operation as evidenced by Borsuk et al. Borsuk et al suggested that those skilled in the art at the time the invention was made would have understood such systems were well known and that additionally such systems would have been useful for application of adhesive in the manufacture of a disposable diaper, see column 4, lines 54-61, column 1, lines 20-53. it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the dispensing techniques of Borsuk et al to attain a uniform and complete deposition of the coating of adhesive upon the substrate (wherein such electrostatic application was known to have included applying opposite charges to the material and the substrate) in the process of applying elastic and deactivating the same as set forth above in paragraph 4.

6. Claims 20-29 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2000-26015 in view of Ducker and any one of Glackin et al, Rogers et al or Ronn.

Japanese Patent '015 suggested that those skilled in the art at the time the invention was made would have provided an elastic member between two webs of an assembly wherein the elastic was secured to the webs at spaced locations with adhesive. The reference taught that those skilled in the art after securing the elastics at the spaced location would have severed the elastics which were unsecured to the webs in the non-adhesive zones. This resulted in the snap back of the elastics in this region. This assembly was employed as an elastic waistband component of a diaper (an absorbent article). There is no indication that one skilled in the art at the time the invention was made envisioned that in the waist region of the undergarment and/or

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diaper that one skilled in the art would have applied a tape of label with indicia thereon. Additionally, the reference only suggested that those skilled in the art would have cut the web and there is no indication that the weakening of the elastics would have involved the use of an embossing arrangement and/or heating to effect the weakening of the elastics.

Ducker et al suggested that it was known to apply elastic strands upon a nonwoven web which carried an adhesive thereon and was bonded between two such nonwoven webs. Subsequent to the bonding of the elastics to the nonwoven webs, the reference suggested that the elastic was to be deactivated via maceration of the elastic with the use of macerators, chemicals, selective laser beams, heat, or freezing means in order to deactivate the adhesive in particular zones. The macerator included a first embossing roller with macerating teeth thereon and a second macerating roller which was merely a back-up roller. The reference suggested that the use of heat to melt the elastic strands would have been a suitable alternative to mechanical maceration.

Additionally, the reference suggested that those skilled in the art at the time the invention was made would have understood that the maceration operation would have cut the elastics in those regions where one did not desire for there to be elastic stretch in the finished assembly. the reference did not expressly state that the heating means associated with the deactivation would have cut the strands, one viewing the reference as a whole would have understood that this was what was desired by Ducker et al. note that in the freezing of the strands and in the maceration of the same the reference made it clear that the strands were cut or severed. The combination failed to teach that in the

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region of the waist one skilled in the art would have applied a reinforcing strip with indicia thereon in the form of a tape or label.

However the references to any one of Ronn, Glackin et al or Rogers et al all taught that one skilled in the art of making a diaper would have associated a tape or label which was printed thereon in the region of the waist in order to provide a target or landing region for the adhesive tape fasteners used therewith for securing the diaper on the wearer. More specifically, the reference to Rogers et al suggested that the target or landing tape 4 was provided with indicia thereon and attached to the diaper in the region of the waistband. The reference to Ronn suggested that the target or landing area 41 was provided with indicia 145 thereon and attached to the diaper in the region of the waistband where the landing included a reinforcing strip 128 secured with adhesive to the backsheet of the diaper in the region of the waist. The reference to Glackin et al provided a similar disclosure where a reinforcing strip 128 bearing indicia thereon 150 was applied to the backsheet of the diaper with adhesive to provide the landing region for the adhesive tape for the fastener of the diaper in the waist region of the assembly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a reinforcing strip in the form of a tape or label bearing indicia in the waist region of a diaper in order to provide a suitable landing and/or target strip for the adhesive fasteners used in the application of the diaper to the wearer as suggested by any one of Glackin et al, Rogers et al or Ronn wherein the waist region included an elastic which was cut and or broken as suggested would have been desirable by Japanese Patent 2000-26015 wherein the elastics would have been severed and/or

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broken using means not only including cutting but also maceration with an embossing roller arrangement as well as the application of heating as taught by Ducker.

Applicant is referred to the paragraphs above for a discussion of the dependent claims and how the reference to Ducker suggested the same.

7. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 6 further taken with Borsuk et al.

While the reference to Japanese Patent '015 and Ducker et al suggested that one skilled in the art at the time the invention was made would have applied an adhesive material upon the nonwoven web, the reference failed to teach that those would have employed electrostatic forces to facilitate the application wherein the adhesive would have had a charge applied to the same and the substrate to be coated would have had an opposite charge associated with it. The applicant is referred to paragraphs 2 and 4 above for a complete discussion of Japanese Patent '015 and Ducker et al. The artisan would have understood that in the manufacture of a disposable diaper such electrostatic coating with an adhesive would have been desirable as such would have facilitated proper placement of the adhesive upon the substrate during the coating operation as evidenced by Borsuk et al. Borsuk et al suggested that those skilled in the art at the time the invention was made would have understood such systems were well known and that additionally such systems would have been useful for application of adhesive in the manufacture of a disposable diaper, see column 4, lines 54-61, column 1, lines 20-53. it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the dispensing

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techniques of Borsuk et al to attain a uniform and complete deposition of the coating of adhesive upon the substrate (wherein such electrostatic application was known to have included applying opposite charges to the material and the substrate) in the process of applying elastic and deactivating the same as set forth above in paragraph 6.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
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JHA

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August 4, 2005